

**Appendix A: Sample Postscript Code without Correction**

%!PS

% Rectangles before anti-bottling artifacts treatment

true setoverprint

%item 1

% Three adjacent rectangles set down in arbitrary order

% .0 color value is considered transparent

.1 .2 .3 .4 setcmykcolor

100 100 100 100 rectfill

.0 .1 .2 .3 setcmykcolor

100 200 100 100 rectfill

.0 .0 .1 .2 setcmykcolor

100 300 100 100 rectfill

%item 2

% Two adjacent rectangles set down in arbitrary order

% .0 color value is considered transparent

.0 .1 .2 .3 setcmykcolor

300 100 4 4 rectfill

.1 .0 .2 .3 setcmykcolor

300 104 4 4 rectfill

showpage

## Appendix B: Sample Postscript Code with Correction

%!PS

### % Rectangles after anti-bottling artifacts treatment

% item 0

```
% Calculation of 1 device space pixel (= 1 output pixel)
```

```
/OneDevicePixWidth 1 1 idtransform pop def
```

```

    /OneDevicePixHeight 1 1 idtransform exch pop def

```

```

true setoverprint

```

```

true setoverprint

```

10	100	100
11	100	100
12	100	100
13	100	100
14	100	100
15	100	100
16	100	100
17	100	100
18	100	100
19	100	100
20	100	100
21	100	100
22	100	100
23	100	100
24	100	100
25	100	100
26	100	100
27	100	100
28	100	100
29	100	100
30	100	100
31	100	100
32	100	100
33	100	100
34	100	100
35	100	100
36	100	100
37	100	100
38	100	100
39	100	100
40	100	100
41	100	100
42	100	100
43	100	100
44	100	100
45	100	100
46	100	100
47	100	100
48	100	100
49	100	100
50	100	100
51	100	100
52	100	100
53	100	100
54	100	100
55	100	100
56	100	100
57	100	100
58	100	100
59	100	100
60	100	100
61	100	100
62	100	100
63	100	100
64	100	100
65	100	100
66	100	100
67	100	100
68	100	100
69	100	100
70	100	100
71	100	100
72	100	100
73	100	100
74	100	100
75	100	100
76	100	100
77	100	100
78	100	100
79	100	100
80	100	100
81	100	100
82	100	100
83	100	100
84	100	100
85	100	100
86	100	100
87	100	100
88	100	100
89	100	100
90	100	100
91	100	100
92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

**Abstract**

[illegible]

$\frac{1}{2}$  % item 1

□ **0/1 Knapsack Problem**

20 % The three adja

% and extended c

1992

0% .0 color value

1. The first step is to identify the problem.

Figure 1

```
.0 .0 .1 .2 setcmykcolor
```

100 OneDevicePixWidth sub 300 OneDevicePixHeight sub

100 OneDevicePixWidth add 100 OneDevicePixHeight add rectfill

```
.0 .1 .2 .3 setcmykcolor
```

100 OneDevicePixWidth sub 200 OneDevicePixHeight sub

100 OneDevicePixWidth add 100 OneDevicePixHeight add rectfill

.1 .2 .3 .4 setcmykcolor

100 OneDevicePixWidth sub 100 OneDevicePixHeight sub

100 OneDevicePixWidth add 100 OneDevicePixHeight add rectfill

% item 2

% The two rectangles after adjacent edges split into 1x1 rectangles

% and the two cores extended on all four sides by one output pixel

% .0 color value is considered transparent

% rectangle 1

.0 .1 .2 .3 setcmykcolor

300 OneDevicePixWidth sub 100 OneDevicePixHeight sub

4 OneDevicePixWidth add 4 rectfill

300 OneDevicePixWidth sub 104 OneDevicePixHeight sub

OneDevicePixWidth OneDevicePixHeight rectfill

301 OneDevicePixWidth sub 104 OneDevicePixHeight sub

OneDevicePixWidth OneDevicePixHeight rectfill

302 OneDevicePixWidth sub 104 OneDevicePixHeight sub

OneDevicePixWidth OneDevicePixHeight rectfill

303 OneDevicePixWidth sub 104 OneDevicePixHeight sub

OneDevicePixWidth OneDevicePixHeight rectfill

304 OneDevicePixWidth sub 104 OneDevicePixHeight sub

OneDevicePixWidth OneDevicePixHeight rectfill

% rectangle 2

.1 .0 .2 .3 setcmykcolor

300 OneDevicePixWidth sub 104

4 OneDevicePixWidth add 4 OneDevicePixHeight add rectfill

300 OneDevicePixWidth sub 104

OneDevicePixWidth OneDevicePixHeight rectfill

301 OneDevicePixWidth sub 104

OneDevicePixWidth OneDevicePixHeight rectfill

302 OneDevicePixWidth sub 104

OneDevicePixWidth OneDevicePixHeight rectfill

303 OneDevicePixWidth sub 104

OneDevicePixWidth OneDevicePixHeight rectfill

304 OneDevicePixWidth sub 104

OneDevicePixWidth OneDevicePixHeight rectfill

showpage

006080"44.030900